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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,558	05/07/2001	Borkur Arnvidarson	P66611US0	8740

136 7590 06/29/2004

JACOBSON HOLMAN PLLC  
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WASHINGTON, DC 20004

EXAMINER
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ZEMAN, MARY K

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/830,558

Applicant(s)

ARNVIDARSON, BORKUR

Examiner

Mary K Zeman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/9/2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 80-138 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 80-83, 85-92, 102, 103, 105-116, 120-123, 125 and 131-138 is/are rejected.
- 7) ☒ Claim(s) 84, 93-101, 104, 117-119 and 126-129 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The amendment filed 4/9/04 has been entered and considered.

Claims 80-138 are pending in this application. Claims 124-138 are newly added.

Applicant's arguments filed 4/9/04 have been fully considered but they are not persuasive. Any rejections not repeated below have been withdrawn.

Claims 98 and 105 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 98, the claim ends with "indoles and." This appears to be a mistake from the amendments to the claims.

In claim 105, the amended phrase "wherein of the assessment of particles is performed..." does not make sense. It would appear the phrase should read "wherein the assessment..."

Claims 80-83, 85-92, 102, 103, 105-116, 120-123, 125, 131, 132, 133, 134-138 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graupner (WO 98/04119; PTO-1449) in view of Packard et al. (1993) for the reasons set forth in the previous office action. *To the extent this rejection is newly applied, it is necessitated by Applicant's amendments.*

Applicant argues that the art does not teach the simultaneous measuring/testing and milking. These arguments are not persuasive, as Packard was not relied upon for the simultaneous measuring and testing, but for the assessment of particles in milk.

As set forth in the International Preliminary Examination Report mailed 5/31/00, Graupner et al. disclose a method for regulating a milking process comprising identifying a volume of milk, assessing a property of the identified volume by measuring the conductivity, obtaining a result of the assessment of the identified volume of milk, providing a predetermined milk quality parameter, correlating the result of the assessing with the predetermined parameter, transferring the result to a regulating means capable of regulating the milking process, and regulating said process. See Page 10, paragraph 2, page 12 paragraphs 1-2, claims 1, 2, 24, 25

and 30. Applicant appears to concede these teachings. These are the same steps as set forth in claim 80, except for the teaching of the assessment of particles.

Packard et al. Set forth how to test a sample for such particles, and provide motivation to test such particles in a milk sample. Packard notes that the assessments were done by well known, often performed methods (p299, second full paragraph) which appears to be the same methods as those encompassed by the claims. Counting of somatic cells in the milk is well known to identify cows that may have mastitis, or some other infection. Early identification of a cow with mastitis or another infection or poor milk quality would allow the segregation of the milk of that cow, or prevent milking of that animal at all. The methods of Packard are fully compatible with the automated system of Graupner et al.

As set forth previously, Graupner et al. (WO 98/04119 A1) disclose methods of and systems for regulating a milking process. This process identifies a volume of milk, assesses a property of the milk through conductivity, obtains a result of the assessment, provides a predetermined milk quality parameter, correlates the step of the assessment with the predetermined milk quality parameter, transfers the correlated result to a regulation means capable of regulating the milking process, and regulates the process based upon the correlated result. The disclosed methods and systems provide for testing of individual quarters of milk, at various times, before or after the individual animal is identified, directs the milks to one or more outlets or storage means, and stores the assessment data in an appropriate manner. Portions are substantially disposable, and physically limit the size of the sample. The physical attributes of the disclosed system meet the limitations of the system of the rejected claims 107-116 and 120-123.

Graupner et al. do not teach the assessment of particles within the sample of milk wherein the particles are somatic cells, blood particles or particles of body tissue. Graupner does not teach the further assessment of temperature and/or pH or assessment of fat, protein, or lactose concentration.

Packard et al. (Packard et al. (1993) Journal of AOAC International Vol. 76, No. 2, pages 297-305) disclose the automated sampling and assessment of several milk properties. Packard et al. analyze milk samples for somatic cell count, fat content, protein content, lactose content, and other solids content in samples taken automatically. The results of these analyses were not

statistically significantly different from the analyses of samples taken manually. The automated sampling was found to provide results that were as accurate as the manual sample, and the automated sampling methods were adopted as a standard by the AOAC. Packard notes that the assessments were done by well known, often performed methods (p299, second full paragraph) which appears to be the same methods as those encompassed by the claims. Counting of somatic cells in the milk is well known to identify cows that may have mastitis, or some other infection.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a means for particle assessment to the method and system of Graupner. One would have been motivated to have added such a step and means for the step to have better assessed the quality of milk being pumped. The earlier that problems with the milk being pumped could have been identified, the earlier steps could be taken to deal with the problem: such as stopping the milking of a cow that has mastitis. One of skill in the art would have wanted to stop the milking of an infected cow so that the affected milk would not have reached a pooled tank and rendered the tank affected. As the methods and systems of Graupner already provide for a portion of the system for the analysis of a volume of milk, the further analysis of a particle, cell or milk property would have been well within the level of skill on one in the art, and one of skill in the art would have had an excellent expectation of success at being able to perform the added analyses. As such, the method and system of the claims would have been *prima facie* obvious to one of skill in the art especially in the absence of evidence to the contrary.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary K Zeman whose telephone number is (571) 272 0723

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P Woodward can be reached on (571) 272 0722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. **Should you have questions on the contents of the electronic file, or on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).**

  
MARY K. ZEMAN  
PRIMARY EXAMINER  
05/16/04  
6/25/04